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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,277	10/27/2003	Jason M. Brewer	TI-25247A	2806

7590 12/20/2004

RONALD O. NEERINGS
Texas Instruments Incorporated
Mail Station 3999
P.O. Box 655474
Dallas, TX 75265

EXAMINER

PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,277

Applicant(s)

BREWER, JASON M.

Examiner

Prieto Beatriz

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-47 and 51-71 is/are rejected.
- 7) ☒ Claim(s) 48-50 and 72-74 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/27/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to Application No. 10/694,277 filed 10/27/03, claims 1-29 have been canceled, claims 30-74 have been added and remain pending.
2. Applicant's submission of an information disclosure statement (IDS) is acknowledged, references have been considered, PTO-1449 has been initiated and enclosed.

Claim Rejection under 35 U.S.C. 101

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 30-50 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,657,999. Although the conflicting claims are not identical, they are not patentably distinct from each other for the reasons noted below.

Application No. 10/694,277 is an obvious variation of patent 6,657,999 (referred to as patent '999). In this case, claims 30-50 of the application have substantially the same element of claims 1-15, for example, claims 30-31 are the same as claim 1 of the patent; claims 32-34 of the application are the same as claims 1 and 4 of the patent; claims 35-50 are the same as claims 2-15 of the patent, claim 55-56 and 59 of the application are the same as claim 16 of the patent; and claims 61-74 of the application are

the same as claims 1, and 5-15 of the patent. The difference between the application and the patent is that in the application claims 30-31 are broader than claim 1 of the patent, and the computer (link layer gateway) has a network interface card to enable communication with the network, which thereby must be connected to the network medium via the network interface. The difference between claims 30-50, 55-56, 59-74 of the application and the patent are suffice to render the invention of these claims of the application patentably distinct and/or therefore substantially the same invention and/or a mere obvious variation of the patent '999.

Claim Objection

5. Claims 48-50 and 72-74 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejection under 35 U.S.C. 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 30-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoare et. al. (US 4,627,052) referred to as '052.

Regarding claim 30, Hoare teaches a ("link layer gateway computer") device (7 of Fig. 1) operable to communicate a data packet from a source host computer selected from one of a plurality of host computers coupled to a first network medium to a destination host computer selected from one of a plurality of host computers coupled to a second network medium. ('052: col 1/lines 5-18, 33-43).

Regarding claim 31, the link layer gateway computer operable to communicated a data packet from a source host computer selected from one of said plurality of host computers coupled to said second network medium to a destination host computer selected from one of said plurality of host computers coupled to said first network medium ('052: col 1/lines 5-8, 33-43).

8. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by Videlock et. al. (US 5,251,213) referred to as '213.

Regarding claim 30, Videlock et. al. teaches a ("link layer gateway computer") gateway operable to communicate a data packet from a source host computer selected from one of a plurality of host computers coupled to a first network medium to a destination host computer selected from one of a plurality of host computers coupled to a second network medium. ('213: col 1/lines 10-col 2/line 11)

9. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by Bosack (US 5,088,032) referred to as '032.

Regarding claim 30, Bosack teaches a ("link layer gateway computer gateway") bridge operable to communicate a data packet from a source host computer selected from one of a plurality of host computers coupled to a first network medium to a destination host computer selected from one of a plurality of host computers coupled to a second network medium. (032: col 1/lines 10-51).

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

11. Claims 30-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Templin et. al. (US 5,781,550) referred to as Templin.

Regarding claim 30, Templin teaches a ("link layer") gateway computer (550 of Fig. 1, col 4/lines 49-55) operable to communicate a data packet from a source host computer selected from one of a plurality of host computers coupled to a first network medium to a destination host computer selected from one of a plurality of host computers coupled to a second network medium. (550: col 3/lines 65-col 4/line 20, gateway: col 1/lines 10-33, 36-41, col 2/lines 3-9, 53-65, col 3/lines 65-col 4/line 10, 33-41, 49-55).

Regarding claim 31, the link layer gateway computer operable to communicated a data packet from a source host computer selected from one of said plurality of host computers coupled to said second network medium to a destination host computer selected from one of said plurality of host computers coupled to said first network medium (550: col 2/lines 62-65).

12. Claim 30 is rejected under 35 U.S.C. 102(e) as being anticipated by Krause et. al. (US 5,590,285) referred to as '285.

Regarding claim 30, Krause teaches an ("link layer gateway computer") IS computer for interconnecting a first and second network (e.g. local and remote LANs) each having a transmission medium and computers attached thereto (e.g. PCs, etc) and passing or forwarding packets from a first network (having a source and destination address) to another computer on the second network (285: col 1/lines 10-col 2/line 20 and col 3/lines 20-40, Fig. 2 prior art, col 8/lines 63-col 9/line 11 and Fig. 4).

Claim Rejection under 35 U.S.C. 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 32, 35-36, 38-47 and 51-71 rejected under 35 U.S.C. 103(a) as being unpatentable over Templin in view of Krause et. al. (US 5,590,285) referred to as '285.

Regarding claim 32, and 35-36, however Temple does not explicitly teach wherein said first or second network medium is local area network, a wide area network, and an Ethernet network.

Krause teaches an ("link layer gateway computer") IS computer for interconnecting a first and second network (e.g. local and remote LANs) each having a respective first and second transmission medium and computers attached thereto (e.g. PCs, etc) and enable communication between the computers from one network to another (285: col 1/lines 10-col 2/line 20 and col 3/lines 20-40, col 8/lines 63-col 9/line 11 and Fig. 2 & 4) further teaching

wherein said first or second network medium is local area network, a wide area network (285: col 8/lines 53-55, Fig. 4), an Ethernet network (285: col 15/lines 24-30).

It would have been obvious to one ordinary skilled in the art at the time the invention was made given the teachings for implementing his teachings without requiring modification on the host computers on the network and independent of there limitations, and without requiring the gateway computer to be a dedicated computer, the teachings of Krause would be readily apparent. One would be motivated to enable bridging, routing and brouting function on an expandable computer system multiple different types networks such as Ethernet token rings, token buses, FDDI, ISDN, etc.

Regarding claim 38, the computer comprising a first and second network interface ("card") coupled to respective first and second network transmission medium to enable communication between said computer and each network medium (285: col 6/lines 9-32), one of the network medium is an Ethernet (285: col 15/lines 24-30).

Regarding claim 39, each first and second network interface coupling said computer to respective network transmission medium attached thereto to enable communication between said computer and respective network medium (285: col 6/lines 9-32)

Regarding claim 40, a first and second network interface coupling computer to respective first and second network transmission medium (285; col 6/lines 9-32).

Regarding claim 41, the gateway has an assigned IP address (550: col 1/lines 10-23, 41-53);

responsive to receiving at the first or second network interface circuits a data packet, the IP protocol handler (550: 302-303 of Fig. 3) evaluates a destination IP address in the received data packet, the IP protocol handler is responsive to the received data packet if the destination IP address corresponds to the gateway (550: col 6/lines 10-22 & col 7/lines 31-35).

Regarding claim 42, the computer is programmed to execute an application program (304) coupled to communicate with the IP protocol handler (550: Fig. 3, col 5/lines 60-62).

Regarding claim 43, the gateway is programmed to execute a link layer protocol handler (310/311) coupled to communicate with each of the first and second network interface circuits (231/232) (550; Fig. 3);

responsive to either of the first and second network interface circuits receiving a data packet comprising an IP communication, the link layer protocol handler evaluates a destination IP address in the received data packet (550: col 6/lines 10-22 & col 7/lines 31-35); and

responsive to determining that the destination IP address does not correspond to the assigned address of the link layer gateway computer (550: col 6/lines 10-23), the link layer protocol handler determines if a source host computer which transmitted the received data packet and the destination host computer (i.e. local and remote addresses) designed by the destination IP address associated with a session/know address information are not on either the first network medium or the second network medium, i.e. their address are not recorded or cannot be identified (550: col 7/lines 5-30).

Regarding claim 44, wherein the IP protocol handler is independent of the link layer protocol handler (285: col 10/lines 30-39).

Regarding claim 45, wherein, responsive to the link layer protocol handler determining that the source host computer which transmitted the received data packet and the destination host computer designated by the destination IP address are from a trusted network and untrusted network, respectively (550: col 5/lines 9-20), i.e. not from the same network mediums;

the link layer protocol communicates the received data packet from the network medium connected to the source host computer to the network medium connected to the destination host computer (550 col 4/lines 33-39)

Regarding claim 46, the received data packet further comprises a hardware physical address (550: col 1/lines 45-47, 51-53, col 5/lines 46-49); the destination host computer comprises a network interface circuit coupled to the network medium (550: col 4/lines 3-6, 285: col 2/lines 25-36, col 1/lines 45-67);

the network interface circuit of the destination host computer is responsive to a destination hardware physical address (285: col 1/lines 45-67 and col 2/lines 25-36; and

prior to communicating the received data packet from the network medium connected to the source host computer to the network medium connected to the destination host computer, the link layer protocol handler changes the hardware physical address to match the destination hardware physical address (550; col 10/lines 45-59).

Regarding claim 47, this claim comprises substantially the same limitations as those discussed on claim 43, same rationale of rejection is applicable.

Claims 48-50 discussed above.

Regarding claim 51, a computer, comprising: a first protocol handler (320) coupling a first network interface circuit (231) to an application program (340) (550: Fig. 3);

a second protocol handler (321) coupling a second network interface circuit (232) to an application program (340) (550: Fig. 3); and

a link layer protocol (326) coupling said first protocol handler and said first network interface circuit to said second protocol handler and said second network interface circuit (550: Fig. 3).

Regarding claim 52, wherein said link layer protocol (326) is at the same hierarchical level as said first protocol handler (320) and said second protocol handler (321) (550: Fig. 3).

Regarding claim 53, wherein said link layer protocol is not part of an operating system of said computer (304) (550: fig. 3).

Regarding claim 54, wherein said link layer protocol is not part of the operating system of said computer and, therefore, executes independently of operating system protocols (550: col 4/lines 56-col 5/line 8, 285: col 5/lines 40-44).

Regarding claim 55, wherein said link layer protocol detects whether a data packet received on said first/second network interface circuit is addressed "intended" for a computer coupled to the other of said first network interface circuit and said second interface circuit (550: col 6/lines 10-22, col 7/lines 31-35).

Regarding claim 56, this claim is substantially the same as limitations on claims 41 and 45, same rationale of rejection is applicable.

Regarding claim 57, said data packet does not reach any application program of said computer (285: col 2/lines 50-56, col 3/lines 59-60, col 4/lines 50-55).

Regarding claim 58, wherein said first network interface is bi-directionally coupled to said first protocol handler (550: Fig. 3).

Regarding claim 59, wherein said first network interface is designed to receive a network medium different from the network medium to be received by said second network interface (550: col 5/lines 46-54, 285: col 6/lines 9-32).

Regarding claim 60, wherein said second network interface is bi-directionally coupled to said second protocol handler (550: Fig. 3).

Regarding claim 61, this claim is substantially the same as claim 32, same rationale of rejection is applicable.

Regarding claim 62, this claim is substantially the same as claim 33, same rationale of rejection is applicable.

Regarding claim 63, this claim is substantially the same as claim 34, same rationale of rejection is applicable.

Regarding claims 64-71, these claims are substantially the same as claims 40-47, same rationale of rejection is applicable.

15. Claims 33-34 and 62-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Templin in view of Krause in further view of Hoffman, et. al. IEEE 1394: A Ubiquitous Buss, IEEE, 1063-6390, 1995, p. 334-338.

Regarding claims 33-34, and 62-63, although the prior art teach where one of the network medium is an Ethernet, it does not teach where one of the network mediums is a bus type, particularly, a standard IEEE 1394.

Hoffman teaches a interconnected networks including computers interconnected with IEEE 1394, including one computer on a first network medium communicating with another on a second network medium (section 4.1 p. 335-336), it would have been obvious to one ordinary skilled in the art at the time the invention was made given Templin teachings applicable to include host computers with limiting constraints interconnecting networks comprising bus type networks for coupling laptops would be readily apparent. One ordinary skilled in the art would be motivated to cover a broad spectrum of computers and peripherals supporting flexible topology including branching.

16. Claims 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Templin in view of Wright, Jr. et. al. (US 5,857,201) referred to as Wright hereafter.

Regarding claim 37, Templin does not explicitly teach where one of the network medium is a wireless network;


Wright teaches a gateway computer operable to communicate data from a one of a plurality of portable host computers coupled to a wireless network medium (col 5/lines 40-41) to a destination host computer (Fig. 1 and 2, col 6/lines 21-33).

It would have been obvious to one ordinary skilled in the art at the time the invention was a made given by Templin related to a client-server communication over the Internet including private networks, the teachings of Wright would be readily apparent. One would be motivated to include access to private networks such as enterprise resource utilizing wireless computers enabling unlimited number of user connections over a variety of transmission medium transport networks concurrently.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beatriz Prieto whose telephone number is (571) 272-3902. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Jack B. Harvey can be reached on (571) 272-3896. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see <http://pair-direct.uspto.gov> or the Electronic Business Center at 866-217-9197 (toll-free).


B. Prieto
Patent Examiner
December 11, 2004